If you are using a printed copy of this procedure, and not the on-screen version, then you <u>MUST</u> make sure the dates at the bottom of the printed copy and the on-screen version match.

The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.120.4.a 4 O'Clock (PEER 9) Critical Device & Permit Link Tests From MCR

C-A-OPM Procedures in which this Attachment is used.				
4.120.4				

Hand Processed Changes

HPC No.	<u>Dat</u>	<u>e</u>	Page Nos.	<u>Initials</u>	
	-				
	Approved: _	<u>Si</u>	gnature on File		
		Collider-Ac	celerator Departn	nent Chairman	Date

V. Castillo

4.120.4.a 4 O'Clock (PEER 9) Critical Device & Permit Link Tests From MCR

PASS ANNUAL ACCEPTANCE TEST PROTOCOL

Division A Software Filename and Checksum: Title:	Checksum:
Division B Software Filename and Checksum: Title:	Checksum:
Initial testing complete:	
Test Team Leader's Name (Print):	Life Number:
Test Team Leader's Name (Sign):	Date://
Acceptance test procedure complete (following repairs and retesting if required):	
receptance test procedure complete (tono wing repuis) and recessing it required,	
Test Team Leader's Name (Print):	Life Number:
Test Team Leader's Name (Sign):	Date:/
Test results reviewed by:	
Safety Section Head's Name (Print):	Life Number:
Safety Section Field 5 Fainte (Frint).	
Safety Section Head's Name (Sign):	Date://
Test results accepted by Radiation Safety Committee:	
RSC Member's Name (Print):	Life Number:
RSC Member's Name (Sign):	Date://

1.1	S	etup to test the	e Critical Devices and Permit Link response to a loss of PASS enable.	
		VERIFY VERIFY	The RF Transfer Key is in the Key tree at CD Key switch is set for	MCR XY ARC
		PLACE VERIFY	Peer 9 in Mode 16 Peer 9 is in Controlled Access	MODE 16
		VERIFY VERIFY	MCR sees RHIC Inj. Pri. CD on CD page MCR sees RHIC Inj. inhibit Div A □ and Div B □	DISABLED ON
		VERIFY VERIFY VERIFY	MCR sees RHIC Ring CD, B/S: G1, G2 and G3, on CD page MCR sees RHIC Ring inhibit Div A □ and Div B □ MCR sees RHIC Reachback Latch Div A □ and Div B □	DISABLED ON OFF
		VERIFY VERIFY VERIFY	MCR sees RF CDs on CD page MCR sees RF inhibit Div A □ and Div B □ MCR sees RF Reachback latch Div A □ and Div B □	DISABLED ON OFF
		VERIFY	MCR sees RHIC Permit Link Div A \square and Div B \square	DISABLED
		CLOSE RESET VERIFY	Peer 9 gate: 5GS1 Peer 9 gates: 3GI1, 3EL1, 4GE1, 4GE2, 4MD1, 4MD2, 4GI1, 4GE3, 4EL1, 4ED1 Peer 9 gates: □ 3GI1, □ 3EL1, □ 4GE1, □ 4GED2, □ 4MD1, □ 4MD2, □ 4GE3, □ 4EL1, □ 4ED are	RESET
		SWEEP VERIFY	Peer 9 Zones: 4Z1, 4Z2 Peer 9 Zones: □ 4Z1, □ 4Z2 are	SWEPT
		PLACE VERIFY	Peer 9 in Mode 24 Peer 9 is in No Access	MODE 24
		VERIFY VERIFY	MCR sees RF CDs on CD page MCR sees RF inhibit Div A □ and Div B □	ENABLED OFF
		SET	RHIC prmry BS command	OUT
		VERIFY VERIFY	MCR sees RHIC Inj. Pri. CD on CD page MCR sees RHIC Inj. inhibit Div A \square and Div B \square	DISABLED OFF
		VERIFY VERIFY VERIFY VERIFY	MCR sees RHIC Ring CD, B/S: G1, G2 and G3, on CD page MCR sees RHIC Ring inhibit Div A □ and Div B □ MCR sees RHIC Reachback Latch Div A □ and Div B □ MCR sees RF Reachback latch Div A □ and Div B □	DISABLED OFF OFF OFF

MCR sees RHIC Permit Link Div A \square and Div B \square

□ **VERIFY**

ENABLED

[☐] Check for acceptance of Setup to test the Critical Devices and Permit Link response to a loss of PASS enable

1.2	Test of Critical Devices and Permit Link response to loss of PASS enable from RHIC Key Tree				
		VERIFY	Peer 9 is in No Access	MODE 24	
		VERIFY VERIFY	MCR sees RF CDs on CD page MCR sees RF inhibit Div A □ and Div B □	ENABLED OFF	
		VERIFY	RHIC prmry BS command is set	OUT	
		VERIFY VERIFY	MCR sees RHIC Inj. Pri. CD on CD page MCR sees RHIC Inj. inhibit Div A □ and Div B □	DISABLED OFF	
		VERIFY VERIFY VERIFY VERIFY	MCR sees RHIC Ring CD, B/S: G1, G2 and G3, on CD page MCR sees RHIC Ring inhibit Div A □ and Div B □ MCR sees RHIC Reachback Latch Div A □ and Div B □ MCR sees RF Reachback latch Div A □ and Div B □	DISABLED OFF OFF OFF	
		VERIFY	MCR sees RHIC Permit Link Div A \square and Div B \square	ENABLED	
		TURN OFF VERIFY	Any key in the RHIC Key Tree MCR sees Peer 9 go to	MODE 2	
		VERIFY VERIFY	MCR sees RF CDs on CD page MCR sees RF inhibit Div A □ and Div B □	DISABLED ON	
		VERIFY VERIFY	MCR sees RHIC Inj. Pri. CD on CD page MCR sees RHIC Inj. inhibit Div A \square and Div B \square	DISABLED ON	
		VERIFY VERIFY VERIFY	MCR sees RHIC Ring CD, B/S: G1, G2 and G3, on CD page MCR sees RHIC Ring inhibit Div A □ and Div B □ MCR sees RHIC Reachback Latch Div A □ and Div B □ MCR sees RF Reachback latch Div A □ and Div B □	DISABLED ON OFF OFF	
		VERIFY	MCR sees RHIC Permit Link Div A \square and Div B \square	DISABLED	
1.3	fi	rom RHIC Ke	otance of Test of Critical Devices and Permit Link response to loss of by Tree Devices and Permit Link response to loss of PASS enable from RHIO		
		PLACE VERIFY	Peer 9 in Mode 24 Peer 9 is in No Access	MODE 24	
		VERIFY VERIFY	MCR sees RF CDs on CD page MCR sees RF inhibit Div A □ and Div B □	ENABLED OFF	
		SET	RHIC prmry BS command	OUT	
		VERIFY VERIFY	MCR sees RHIC Inj. Pri. CD on CD page MCR sees RHIC Inj. inhibit Div A □ and Div B □	DISABLED OFF	

		VERIFY	MCR sees RHIC Ring CD, B/S: G1, G2 and G3, on CD page	DISABLED
		VERIFY	MCR sees RHIC Ring inhibit Div A □ and Div B □	OFF
		VERIFY VERIFY	MCR sees RHIC Reachback Latch Div A □ and Div B □ MCR sees RF Reachback latchDiv A □ and Div B □	OFF OFF
	Ш	VEXII'I	NICK Sees RF Reachback laterally A and DIV B	Off
		VERIFY	MCR sees RHIC Permit Link Div A \square and Div B \square	ENABLED
		TURN OFF	Any key in the RHIC RF Key Tree	
		VERIFY	MCR sees Peer 9 go to	MODE 2
		VERIFY	MCD coss DE CDs on CD mass	DICADI ED
		VERIFY	MCR sees RF CDs on CD page MCR sees RF inhibit Div A □ and Div B □	DISABLED ON
	Ш	VEXIF I	NICK sees RF inition DIV A and DIV B	ON
		VERIFY	MCR sees RHIC Inj. Pri. CD on CD page	DISABLED
		VERIFY	MCR sees RHIC Inj. inhibit Div A \square and Div B \square	ON
	_	T/EDIET/	MCD DHICD' CD D/C C1 C2 1 C2 CD	DIGABLED
		VERIFY	MCR sees RHIC Ring CD, B/S: G1, G2 and G3, on CD page	DISABLED
		VERIFY VERIFY	MCR sees RHIC Ring inhibit Div A □ and Div B □ MCR sees RHIC Reachback Latch Div A □ and Div B □	ON OFF
		VERIFY	MCR sees RF Reachback latch Div A □ and Div B □	OFF
	ш	VEXII I	INICA Sees AF Acaciivack lateii Div A alid Div B	Off
		VERIFY	MCR sees RHIC Permit Link Div A □ and Div B □	DISABLED
		DIACE	Door O in Mode 16	
		PLACE VERIFY	Peer 9 in Mode 16 Peer 9 is in Controlled Access	MODE 16
	Ц	VEXII'I	1 cci / is in controlled Access	MODE 10
		PLACE	Peer 9 in Mode 8	
		VERIFY	Peer 9 is in Restricted Access	MODE 8
		heck for accep rom RHIC RF	tance of Test of Critical Devices and Permit Link response to loss of P Key Tree	ASS enable
			END OF TEST PROCEDURE	
TTL:	Sign	n for completio	on of initial testing:	
			Date://	
TTL	: Sig	n for completi	ion of final testing:	
			Date://_	
			Date/	